

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this Examiner's Amendment was given in telephone interview with Grant Houston on June 25, 2009.

IN THE CLAIMS

Please **AMEND** the following claims: 1, 4, 15

Please **CANCEL** the following claim: 3

1. (Currently Amended) A method for transmitting data in an IP network comprising: receiving, by an appliance having a central processing unit (CPU), a data transmission in the IP network;
extracting a source address, a destination address, and at least one port from a header of the data transmission;
looking up the source address and the destination address in an address mask table and determining a most granular bit-value mask by finding a longest prefix match corresponding to each of the source address and the destination address to obtain address result values, the address mask table having a plurality of bit-value masks wherein the plurality of bit-value masks have a plurality of granularities;

Art Unit: 2457

looking up the at least one port in a port mask table to obtain port result values;

forming a source and destination and port flow key based on the address result values and the port result values;

looking up a flow key in the a source and destination and port flow key table to find a corresponding flow entry; and

if the flow entry indicates to deny the data transmission, blocking the data transmission, otherwise transmitting the data transmission in the IP network with a service profile specified by the flow entry;

if no bit-value mask in the address mask table corresponds to the source address or the destination address, no mask is applied to the source address or the destination address.

4. (Currently Amended) The method according to claim 1, further comprising:
if no flow entry corresponds to the formed flow key, a default value is used for the flow entry.

15. (Currently Amended) A system for transmitting data comprising:

an appliance having a central processing unit (CPU);

a receiving unit configured to receive a data transmission in an IP network;

Art Unit: 2457

an extraction unit configured to extract field a source address, a destination address, and at least one port from a header of the data transmission;

a mask table including a plurality of bit-value masks, wherein the plurality of bit-value masks include a plurality of granularities;

a masking unit configured to determine a most granular bit-value mask finding a longest prefix match corresponding to each of the source address and the destination address and finding a match for the port and output a masked flow key based on the matches;

a flow table indexed with reference to the masked flow key; and

a transmitter configured to transmit the data transmission in an IP network according to a flow entry in the flow table corresponding to the masked flow key of the data transmission.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BARBARA N. BURGESS whose telephone number is (571)272-3996. The examiner can normally be reached on M-F (8:00am-4:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2457

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/Barbara N Burgess/
Examiner, Art Unit 2457

Barbara N Burgess
Examiner
Art Unit 2457

June 26, 2009

/ARIO ETIENNE/
Supervisory Patent Examiner, Art Unit 2457